

Homogenous Cosmos Originated from Unique Genesis and its Unique Entanglement Speed

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Abstract: Modern physics has gone so far that there are a number of schools of academia that none can agree with each other, the contradictions ran from fundamental crashing between classic and quantum theories, to the engineering debating if China needs a large Hadron collider. Also, the agreement on the exact dimension of the universe is hard to reach, some said 4 some said 11, we would say its only 2.7! As such in this paper we first argue that the universe comes from the same genesis no matter what dimension it is, then we present a positive and negative momenergy formulae that conserve across the universe that manifests itself in any dimension form, from which we arrived at the unique speed of quantum entanglement with respect to its current entangled local dimension, which says that the entanglement speed in our world is 9931 times of the speed of light in the vacuum.

Keywords: homological objects, cosmic genic origin, unique-genesis quantification, entanglement speed.

1.General Existence & Motion of Matter in Homogenous Cosmos

Essentiality of matter generally comes into being during the course of original generation & formation of matter time and is kept with matter existing as idiographic object under the proper generative & formative preconditions.^[1] The dynamic regularity of universal existence & motion in homogenous cosmos radically roots in homological generation of matter and time——sequential generation of homological genic unit series of $i_0, i_1, i_2, \dots i_n$, and any one of them can be multiplied as $i_{n(+1)}, i_{n(+2)}, i_{n(+3)}, \dots i_{n(+p)}$, ($n, p \in \mathbb{N}$), $\mathbb{N}$ is natural number, and gradual enrichment of elementary genic units $i_{n(+1)}, i_{n(+2)}, i_{n(+3)}, \dots i_{n(+p)}$, ($n, p \in \mathbb{N}$) in space make “**reciprocal idiosyncrasy towards PNT(Positive & Negative Transmutation) equilibrium + accessible space overall arrangement for PNT reciprocity**” come true stage by stage from discrete to continuous^[2], resultingly, reciprocal PNT combinations in gradation I~IV^{[3][4][5]} come into being one after another and enrich in full space of four dimensions that we see today.

1.1. Universal existence & motion is just essence objectification of matter in cosmos

Existence & motion is but idiographic embodiment of essentiality of matter in space——homological generation of matter in homogenous cosmos has inherently predestined the PNT action of matter time integration, and PNT action of matter integration radically determines idiographic existence & motion of matter in space.

So-called “matter existence” is spontaneous physical occurrence due to PNT action with

instinctive PNT equilibrium of matter integration once integral accumulation of living positive & negative transmutation of matter integration satisfies $\int_0^t [d(M \rightarrow m) - d(M \leftarrow m)] dt = m$, which usually implicates magnitude of mass, configuration and energetic status of matter integration.

So-called “matter motion” is that, when matter integration performs PNT action under proper space condition by the light of nature, as external dissonance to PNT performance of matter integration, once “ $d(M \rightarrow m) \neq d(M \leftarrow m)$ ” of matter integration occurred, spontaneous occurrence of PNT action with instinctive PNT equilibrium must be subject to fundamental of instinctive PNT reciprocal equilibrium towards optimum PNT operation, and instinctive PNT equilibrium in operation must accomplish quantitative change from $d(M \rightarrow m) \neq d(M \leftarrow m)$ towards $d(M \rightarrow m)' = d(M \leftarrow m)'$ as expediently as possible, $d(M \rightarrow m) \neq d(M \rightarrow m)'$; $d(M \leftarrow m) \neq d(M \leftarrow m)'$.

As a result, matter motion can be mathematically formulated as below:

$$\begin{cases} \int_0^t [d(M \rightarrow m) - d(M \leftarrow m)] dt = m \\ mV = d(M \leftarrow m) * Y \\ d(M \rightarrow m) \neq d(M \leftarrow m) \end{cases}$$

1.2. “PNT dynamics” is freewheeling logic extension of homology hypostatization of cosmic endosome

The confirmation of Homogenous cosmos originated from unique genesis postulate with supplementation of the first fractional dimension grade auxiliary hypothesis of “Space-matter fully embodying cosmos postulate” makes the two logic extensions of Homogenous cosmos originated from unique genesis postulate self-evident^[6], succedent hypostatization of the two logic extensions of Homogenous cosmos originated from unique genesis postulate materialized homology hypostatization of cosmic endosome.

1.2.1. Objectification of logic extension 1 of Homogenous cosmos originated from unique genesis postulate directly leads to logos of “fractional space field” and “time dynamic speed”.

Under intense rational illumination of logic extension of Homogenous cosmos originated from unique genesis postulate, as long as we have no reason to exclude space out of category of cosmos, we have to confirm that space must be coordinative homology of matter and must be as physical as matter. And at any rate, nothing seems so powerful to indulge us validating, as coordinative homology of matter, space is another block of material cake as twinborn sister of matter.

As the homology correlations throughout cosmic endosome, especially the deduction of homological filiation of space & matter even ultimate confirmation of space son and matter father, this apparently means presence of PNT action between space and matter even inheriting of dynamic connotation of space to connatural existence & motion of matter in space by performance of PNT action.

And indeed, time dynamic speed is comprehensive dynamic origin of universal existence & motion even including motivity of cosmic evolution; if no time dynamic speed, cosmos is but cosmic genic origin itself without any physical connotation^{[7][8]}.

1.2.2. The “Taiji-8-gua Pattern” from Chinese culture can visually reflect the instinctive PNT equilibrium of PNT dynamics

Once mentioning the PNT dynamics principium, we always think of the so-called “Taiji-bagua pattern”. We think the “pattern” can visually reflect and racially incarnate the thought quintessence of Homogenous Cosmos Originated from Unique Genesis, especially the instinctive PNT equilibrium of PNT dynamics as below.

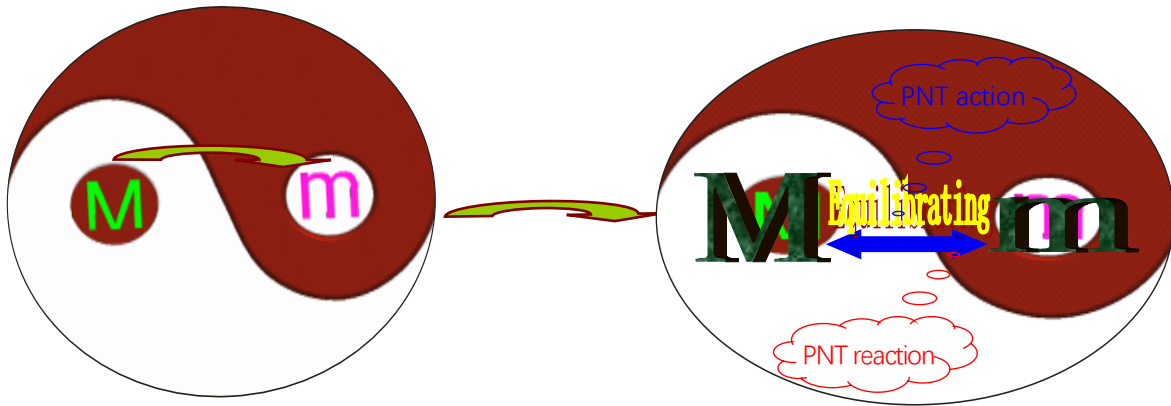


Figure 1. Positive and Negative Matter and Space Dynamic Relationship

The Chinese word “TaiJi” herein may mean “cosmos” ten to one for whose Chinese literal meaning is just upmost limit of large scale. In the pattern above, the white vacant fish profile represents the positive space field, (eyeball is negative matter(M)) and the black fish profile represents negative space field (eyeball is positive(m)); the white vacant fish profile district and the black fish profile district coexist in and cram the TaiJi-8-gua circle implies that the cosmos consists of “positive” and “negative”. The covariant circumgyration of the fish profile curve between the white vacant fish profile district and the black fish profile district represents the positive & negative transmutation (PNT) between space and time; and the everlasting dynamic symmetry of the white empty fish profile district and the black fish profile district represents the instinctive PNT equilibrium of matter time integration.

The cases are that an elementary genic unit has upmost probability to be converged by 3D field genic units in different sorts in space field totally^{[9][10]}, however, during certain existent interval throughout PNT performance, none, only 1 of the 3 field, only 2 of the 3 field or all of the 3D field genic units in different sorts stochastically converged—— $C_3^0=1$, $C_3^1=3$, $C_3^2=3$, $C_3^3=1$, which means there are totally 1 or 3 probabilistic existent cases for the elementary genic unit to shape its configuration in space.

And as a result, $C_3^0 + C_3^1 + C_3^2 + C_3^3 = 1 + 3 + 3 + 1 = 8$, which means, as elementary genic units converged by three field genic units in different sorts have to exist in everlasting PNT operation, there are only 8 probabilistic existent cases for elementary genic units to shape their configurations totally.

2. Brief Review of Scientific Experiment

2.1. Definition of scientific experiment

So-called conventional physical purview of human, in simple words, is just the accessible impression about universal existence & motion upon human biologic function under human normal existent status in cosmos^[11]. Of course, as observer in cosmos, as existent status of us can be slightly changed, there is tiny change range of conventional physical purview of human proportionally for relativity domino effect.

2.2. Artificial limitation of scientific experiment

As limitation of biologic function of human, limitation of idiographic conventional physical purview of human is generally as below:

- Relativity limitation of human physical purview, ——in terms of general existence & motion in cosmos, it's only possible for human to perceive general existence & motion in cosmos a relative intuitive impression human standing on the earth with general motion speed as the earth itself in cosmos.
- Limitation of conventional physical purview towards microcosmos of both space and time, it's impossible for effective physical purview of human to approach infinitesimal dimension and infinitesimal interval in microcosmos, we call it “biologic perception interaction”.

- It's only possible for experiment & measurement to be implemented under temporal sense of artificial definition of basic dimensions.

In the face of the accessible information offered by experimental performance, as historical limitation, what we had ever implemented may be not all we had ever perceived on the spot^{[12][13]}. Whereas, we have to admit, what we had ever perceived is of course more substantial than what we had ever implemented, after all, experimental performance is always ready for facility & possibility of rational perception, rational perception for scientific comprehension or demonstration is direct target of experimental performance.

3. Entanglement Speed

3.1. The origin of the number 'e'

Having said that the particles are mutually convertible, thus the local space time of a matter should be mutually convertible too^[14]. We believe that the momentum is convertible between entangled pair of particles. And the equilibrium is reached at the nature number dimension of the world, i.e. $e=2.71828$ ^[15]. The argument comes from its origin: Compound interest formula etc.

The effect of earning 20% annual interest on an initial \$1,000 investment at various compounding frequencies. Jacob Bernoulli discovered this constant in 1683 by studying a question about compound interest: An account starts with \$1.00 and pays 100 percent interest per year. If the interest is credited once, at the end of the year, the value of the account at year-end will be \$2.00. What happens if the interest is computed and credited more frequently during the year?

If the interest is credited twice in the year, the interest rate for each 6 months will be 50%, so the initial \$1 is multiplied by 1.5 twice, yielding $1.00 \times 1.5^2 = \$2.25$ at the end of the year. Compounding quarterly yields $1.00 \times 1.25^4 = \$2.4414\dots$, and compounding monthly yields $1.00 \times (1 + 1/12)^{12} = \$2.613035\dots$ If there are n compounding intervals, the interest for each interval will be $100\%/n$ and the value at the end of the year will be $1.00 \times (1 + 1/n)^n$.

3.2. Beyond and below speed of light with random fractal

Another application of e , also discovered in part by Jacob Bernoulli along with Pierre Raymond de Montmort, is in the problem of derangements, also known as the hat check problem: n guests are invited to a party, and at the door, the guests all check their hats with the butler, who in turn places the hats into n boxes, each labelled with the name of one guest. But the butler has not asked the identities of the guests, and so he puts the hats into boxes selected at random. The problem of de Montmort is to find the probability that none of the hats gets put into the right box. The answer is:

$$\sum_{k=0}^n \frac{(-1)^k}{k!}$$

As the number n of guests tends to infinity, p_n approaches $1/e$. Furthermore, the number of ways the hats can be placed into the boxes so that none of the hats are in the right box is $n!/e$ rounded to the nearest integer, for every positive n .

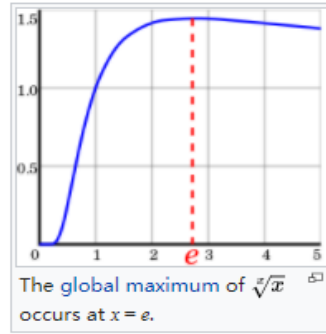


Figure 2. Optimum Equilibrium Dimension of Local Space

This graph further shows that e is a special number that maximize itself in the universe^{[16][17]}. As universe is formulated like compound interests or a random hat collector that maximize itself, we believe the popular dimension should be 2.7 in large statistic scale, although we see 4 dimension in daily life.

For the positive matter, we have

$$E = m C^2;$$

For negative matter, we have

$$-E = -m(-c)^2;$$

All together we have

$$E^2 = m^2 c^4;$$

And the momenergy should be

$$E^2 = m^2 g^e$$

Where g is the entanglement speed, or ghost speed named by Einstein^{[18][19]}.

Solve above equations, we arrived at

$$g/c = 9930.509917796768180071686850124$$

Assume the precision of: $e = 2.71828182846$, $c = 299792458 \text{ m / s}$;

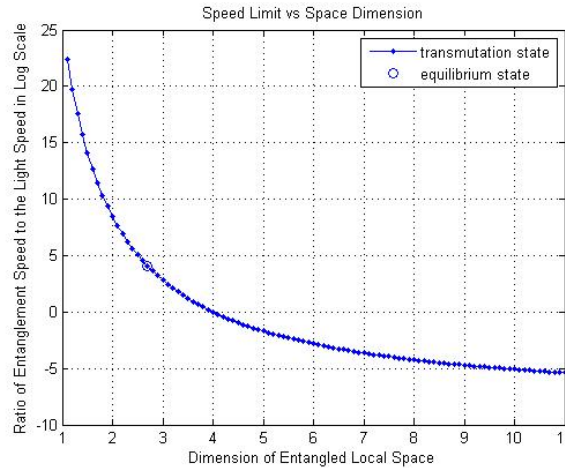


Figure 3. Entanglement Speed versus Local Space Dimension

Having said that the universe can take the form of any dimension, not necessary 2.7, and the corresponding entanglement speed can vary between the speed of light and the infinite, as the dimension goes to zero.

4. Conclusion

We have argued that the matter manifests itself by integration with time first, and then space is formed like bagua, so is the motion and momentum, the momentum in any dimension of the entangled world is conservatively convertible, with the equilibrium state of entanglement speed happens in e dimension,

not necessarily the integer dimension we live in, where the speed of light is the dominant speed. The Matlab software calculation shows that the entanglement speed is 9931 times of the light speed. In order to let readers understand better the Homogenous Cosmos Originated from Unique Genesis in successive and harmonious line with Traditionary Sciences we tried the best to introduce ready-made keywords of Traditionary Sciences as many as possible in appendix.

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Table 1. Keyword Series

Keywords	Explanations of keywords
Homogenous Cosmos Originated from Unique Genesis	“ cosmos ” is an organic hylic aggregation of coordinative homologies of “space” and “matter”. “ cosmos originated from unique genesis ” means entire cosmos is a homogeneity system originated from unique genesis. “ homogenous ” cosmos is the absoluteness of purely homological configuration throughout cosmic category.
Reciprocal PNT combinations in gradation I~IV	Different stages of changing from matter to the entire four dimensions that we see today in the theory of PNT.
Time dynamic speed	Time dynamic speed is mathematical quantification of phony displacement cumulation of field genic units materialized by their mutual dynamic transmuting & transiting in one standard time unit.
PNT	“Positive & Negative Transmutation” is virtually physical carry-over and continuance of homological generation correlation of matter lineally originated from coordinative hylic space and means osmosis transmutation and transition between matter and matter field.
PNT dynamics	PNT dynamics is the mathematical process formulation of all state variables of matter integration spontaneously adjusting due to instinctive PNT reciprocal equilibrium towards optimum PNT operation.
Space dynamic assimilation	The phenomenon that the space arises relative weakening tendency with the increase of moving speed of observer is called “space dynamic assimilation”.
Light-speed	Light-speed is changeable, it changes when objects move into different dimensions.
PNT action	It is the natural performance of positive & negative transmutation and transition between matter and space.
PNT reaction	It is the instinctive PNT operation readjustment of elementary genic units (or matter integrations) towards relative minimum of field potential concrete vallum.

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